R E P O R T R E S U M E S

ED 019 252 SE 004 688

MARINE SCIENCE FILM CATALOG. MOVIES, FILMSTRIPS, AND SLIDES.

BY- CHAPMAN, FRANK L.
CARTERET COUNTY PUBLIC SCHOOLS, BEAUFORT, N.C.

EDRS PRICE - MF-$0.50 HC-$2.88 70P.

DESCRIPTORS- *AUDIOVISUAL AIDS, *AUDIOVISUAL CENTERS, *CATALOGS, *FILMS, *FILMSTRIPS, OCEANOLOGY, SECONDARY SCHOOL SCIENCE, BIOLOGY, COLLEGE SCIENCE, EARTH SCIENCE, ELEMENTARY SCHOOL SCIENCE, ECOLOGY, PHYSICAL SCIENCES, ELEMENTARY AND SECONDARY EDUCATION ACT TITLE 3,

THIS CATALOG CONTAINS ANNOTATED LISTINGS OF 16MM. FILMS, 35MM. FILMSTRIPS, AND 35MM. SLIDES FOR INSTRUCTIONAL USE IN THE MARINE SCIENCES. PARTS 1, 2, AND 3 LIST THOSE WHICH ARE AVAILABLE FROM THE CARTERET COUNTY MARINE SCIENCE PROJECT, AN ELEMENTARY AND SECONDARY EDUCATION ACT TITLE III PROJECT. PART 4 LISTS A-V MATERIALS AVAILABLE ON FREE LOAN FROM SOURCES OTHER THAN THE PROJECT. INCLUDED FOR EACH FILM IS (1) TITLE, (2) PRODUCER, (3) TOPIC DESCRIPTION, (4) RECOMMENDED GRADE LEVEL(S), (5) TIME, (6) COLOR OR BLACK AND WHITE, AND (7) SOUND OR SILENT. INFORMATION ON FILMSTRIPS AND SLIDES INCLUDES (1) PRODUCER, AND (2) DESCRIPTION. (DS)

ED019252

MARINE SCIENCE

FILM CATALOG

Movies, filmstrips and slides of the Carteret

REGIONAL MARINE SCIENCE PROJECT

an ESEA TITLE III PROJECT of the
Carteret County Public Schools

SE004 688

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

CATALOGUE

OF

MARINE SCIENCE

MOVIES, FILMSTRIPS, AND SLIDES

AVAILABLE FROM

THE CARTERET COUNTY

AUDIO-VISUAL AID CENTER

prepared by:
Frank L. Chapman
Regional Carteret County
Marine Science Project

INSTRUCTIONS

Green pages ..... 16 mm Movie available on free loan from Carteret County Marine Science Project.

Yellow pages ..... 35 mm filmstrip available on free loan from Carteret County Marine Science Project.

Blue pages ..... 35 mm slides available on free loan from Carteret County Marine Science Project.

White pages ..... 16 mm movies and 35 mm filmstrips, available on free loan from sources other than Carteret County Marine Science Project.

HOW TO RESERVE FILM

CARTERET COUNTY: Marine Science films are available through the Carteret County Audio-Visual Aids Center. Film booking slips are available to each teacher. Extra slips may be obtained from your local audio-visual coordinator. Fill in the number of the film, title, and first and second choice of dates desired and turn it in to your coordinator. Check out date is on Monday afternoon and film will be returned to the center on Thursday afternoon. In order to be sure the film is available when you need it, you must reserve or book your film two weeks (10 school days) or more in advance.

OTHER COUNTIES: Schools from countys other than Carteret County may borrow films for one week. This can be done by mailing requests to: Marine Science Project, Queen Street School, Beaufort, North Carolina 28516. Return postage will be the responsibility of the borrower. Please order at least 2 weeks in advance.

16mm Movie No. 75

"Challenge of the Oceans" Produced by McGraw-Hill Book Co.

This film is suitable as the introduction or culmination of a unit on oceanology. It stresses techniques and training necessary for the oceanologists.

The first half of the film deals with physical aspects of oceanology. With clever photography and meaningfull scenes, it covers history, climate, currents, instrumentation, water properties and importance of many sciences within oceanology.

The second part of the film deals with biological aspects of oceanology. It begins with the circulation of nutrients. It stresses the importance of plankton as food for larger organisms. The film then turns to exploration of the deep seas and the equipment necessary. Finally, the narrator emphasizes the challenges which the sea holds for modern man.

Recommended: Seventh grade and above.

Data: Running time 29 minutes; color; sound.

16mm Movie No. 76

"Count Down Under" — Produced by National Educational Television

This is an excellent film to show mature audiences interested in oceanology. The theme is a trip to the Indian Ocean aboard the research vessel "Pioneer". Scientists from all over the world participate in the research.

Interviews with the crew and scientists give the film a rather personal touch. Hardships, pleasures, and everyday living are filmed in genuine circumstances.

The movie shows the ocean as a storehouse of untouched natural resources. It ends by showing how man is harnessing the never-ending power of the tides and how he will one day live on and under the sea.

Highly recommended as a culimination to a section on oceanology.

Recommended: Tenth grade and above.

Data: Running time, 50 minutes; black and white; sound.

16mm Movie No. 77

"The Earth: Its Oceans" Produced by Coronet Films

The film starts out by naming the five oceans. A short history of oceanology follows. Emphasis is placed on the many fields of science that make up oceanology. Major geological features of the ocean's floor are discussed with good diagrams. Physical features of water are discussed, with practical application stressed. A salt factory and magnesium mine are shown. The film is recommended as an introduction to a unit on ocean studies.

Recommended: Sixth grade and above.

Data: Running time 13½ minutes; color, sound.

16mm Movie No. 78

"What's Under the Ocean" Produced by Film Associates of California

This is one of the few oceanographic movies suitable for elementary grades. It covers very general concepts and methods of studying the ocean. The first part of the film deals with man's reach beneath the seas. It pictures various methods of diving. Basic characteristics of the ocean basins are pointed out.

The next section deals with research vessels, instruments and techniques. Echo sounders and clam-jawed buckets are two of the instruments discussed.

The final section deals with the contour of the ocean floor. This is done by using an excellent model (filled with dyed water) of the Atlantic and Pacific Oceans. As the model is drained, the features are exposed and described.

Recommended: Fifth grade and above.

Data: Running time 13 minutes; color, sound.

16mm Movie No. 79

"Survival in The Sea; Where Land and Water Meet"

Produced by University of Miami

The setting for this film is the tropical waters of the Atlantic Ocean. It attempts to cover all of the habitats where the water ends and land begins. The animals are described in relation to their form and the particular habitats they occupy. The spray zone, surf zone, mangrove swamp, rocky zone, and tide pool are some of the habitats covered. Some of the animals described are ghost crab, sand flea, blue crab, sea hare, puffer fish, fiddler crab, horseshoe crab, barnacle, sea urchin, and others. The color is good and the film can be of use to students of marine biology on the North Carolina Coast.

Recommended: 7th grade to 12th grade.

Data: Running time, 29 minutes; color; sound.

16mm Movie No. 80

"The Beach-A River of Sand"

Produced by Encyclopaedia Britannica Films

This exceptional film is a must for a unit on interaction between the land and the sea. It best follows "Waves on Water". Unusually good photography and narration enhance the effectiveness of this film.

The film begins by examining the makeup of a beach. The dynamics of the beach are thus covered. The wave tank effectively shows movement of sand by waves as they "feel the bottom". The littoral current is explained and the littoral drift is demonstrated. Aerial photographs effectively show some of the natural dynamics on a beach that cannot be seen by standing on the beach.

The last part of the film is concerned with devices of man for stabelizing beaches, harbors, and inlets. In the laboratory, a mock-up of the Santa Barbara, California, harbor is used to show how sand builds up as a spit. Dredges are also shown as tools to keep the littoral drift operating. Although the film deals with the California coast, much the same situations occur on the Atlantic Coast. The film is highly recommended as supplementary material for a unit on the dynamics of the beach.

Data: Running time, 20 minutes; color and sound.

Recommended: Eighth grade and above. It is part of the eighth grade marine science unit.

16mm Movie No. 81

"Tides of the Ocean" Produced by Academy films

This movie can be a perfect follow-up to a unit on the tides. The movie is well ordered and cleverly presented. Beautifully animated diagrams enhance this film as a teaching tool. The film begins by introducing some of the phenomena associated with the tide: tidal currents, tidal bore and extreme highs and lows of some areas. A short history of the study of tides follows. The causes of tides are explained and illustrated. The last part of the film is concerned with factors that affect the tides. This film is highly recommended.

Recommended: Eighth grade and above. It is part of the Carteret eighth grade marine science unit.

Data: Running time 16½ minutes; color; sound.

16mm Movie No. 82

"Waves on Water" Produced by Encyclopaedia Brittanica Films

This film is splendid on creations, anatomy, and movement of waves. It covers wind waves and seismic waves. The photography and narration are extremely ingenious.

Wind waves are treated in detail first. A large wave tank with a fan helps show how wind waves are formed. The movement of water particles under the influence of a wave is shown by using neutrally bouyant particles in a wave tank. The action of the particles as the wave reaches shallow water is also shown. Aerial views of the coast demonstrate refraction of waves in a unique manner.

The movie's last theme shows production and effects of seismic waves in the Pacific Basin.

This film, with its unique lab type examples, followed with nature's own examples, can be used effectively with a unit on water waves.

Highly recommended as supplementary material.

Recommended: Eighth grade and upward. It is part of the Carteret eighth grade marine science unit.

Data: Running time 16 minutes; color; sound.

16mm Movie No. 83

"Between the Tides" Produced by Contemporary Films

Although the film is British and of the rocky coast, it can be an excellent supplement to a unit on life at the seashore. Its photography and narration are extremely clever, seeming to impel you to visit the shore and see for yourself.
The film, without being too specific, names many organisms found at the seashore. It mentions feeding, protection and reproduction of these organisms. In addition to strictly marine plants and animals, it also covers birds that nest along the coast. The vocabulary is sophisticated in places, but tenth graders could understand the film.

Recommended: Tenth grade and above.

Data: Running time, 22 minutes; color; sound.

"Big Fish---little fish"

Available From: For LOAN, contact the Adult Film Project through any N. C. public library; UNC Bureau of Audio-visual Education, Chapel Hill; A-V Supervisor, State Department of Public Instruction, Raleigh, For PREVIEW or PURCHASE, UNC Bureau of Audiovisual Education, Chapel Hill, North Carolina.

This is a must film for a unit dealing in Coastal Affairs. The film covers the controversial problem of commercial fishing and its future. Produced in North Carolina's Carteret County, its frank and candid interviews with the local fishermen make this film unique in production and subject.

The film covers markets, costs, weather, processing facilities, and other factors that affect commercial fishing. Airplanes, radio-telephone, and other new equipment are covered as improvements now available for commercial fishing. A recommended film.

Recommended: Tenth grade and above.

Data: Running time 29 mintues; black and white; sound.

16mm Movie No. 85

"Life in the Oceans" Produced by Film Assoicates of California

This film simply sticks to the theme implied by the title. It presents, in no particular order, many of the common forms of organisms found in the ocean. The organisms are Pacific Ocean forms, but representative types can be found from the Atlantic. Some definitions and descriptions are added. Living organisms shown include diatoms, starfish, sea urchins, seacucumber, polychaete, sea slug, crab, fish, turtle, seal and porpoise. The movie ends with a review of the types of animals found. It can be used to advantage by the elementary teacher interested in showing the variety of animals living in the sea.

Recommended: Third grade to seventh grade.

Data: Running time 16 minutes; color; sound.

16mm Movie No. 86

"Marine Ecology" Produced by McGraw-Hill Book Co.

This film is a good introduction to Marine Ecology. Although somewhat monotone, the narrator is George L. Clark of Harvard University and Woods Hole. He builds a general background of the physical and biological aspects before getting to the ecosystem complex.

Practical application of ecology to the problems of the world's diminishing food supply begins the film. History and importance of techniques is stressed. "Plankton", "necton" and "benthos" are defined and the fauna and flora of the three types are discussed. Major zones of the sea and their relation to organisms are also discussed. Limiting factors are discussed in relation to distribution of marine organisms. Some of the topics are water, currents, temperature, and light.

Adaptations of deep sea organisms are considered along with a short study of bioluminescience.

The last part of the film covers a general and a specific ecosystem. The diagrams are good and the system is well covered in the narration. Seasonal factors are stressed. The film is repetitive in places, but is a must for a unit dealing with marine ecology.

Recommended: Seventh grade and above.

Data: Running time, 28 minutes; color; sound.

16mm Movie No. 87

"Plankton in the Open Sea" Produced by Encyclopaedia Brittanica Films

This is a good general movie showing methods of collecting and studying plankton, and explaining its improtance as the pasturage of the sea. It is also noted that many large and important species spend some larval stages of life as plankton. This theme is backed up not only with good microphotographs of planktonic organisms, but excellent shots of research vessel, scientists, and crewmen all working toward a common goal.

Recommended: Seventh grade and above.

Data: Running time, 19 mintues; color; sound.

16mm Movie No. 88

"Sea Shell Animals" Produced by Film Associates of California

This movie can be of great advantage to the elementary teacher. Although the animals are Pacific Coast organisms, simular species can be found in North Carolina.

The movie begins with Sally and Jack looking for sea shells. Definitions of mollusks and sea shells follow. Basic form (bivalve, univalve, limpet, etc.) is discussed in relation to ananomy. Some of the animals discussed are chitons mussels, clam, limpet, abalone, cowry, and octopus.

The movie ends by challenging the student to the fun of collecting and arranging sea shell collections.

Recommended: Third grade to seventh grade.

Data: Running time, 10 mintues; color; sound.

16mm Movie No. 89

"Secrets of the Underwater World"

Produced by Walt Disney Studios

"Illustrates the amazing adaptations of some intriguing fresh and salt water organisms. A male stickleback fish, diving spider, archer fish, kelpfish, angler fish and decorator crab, are some of the creatures that perform for the camera. The movie provides good examples of the variety of life and habitats found in fresh and salt water."

It is a good elementary film, but lacks scientific approach. Typical Disney treatment, which includes humanization of the special "actors".

Recommended: Elementary grades;

Data: Running time, 16 minutes; color; sound.

16mm Movie No. 90

"Survival in The Sea; Life on The Coral Reef"

Produced by Univ. of Miami

The setting for this film is the tropical waters of the Atlantic Ocean. A detailed study of the animal and the type structure (soft or hard coral) it builds begins the film. The camera follows a diver, Dr. Storr, as he travels across three zones of the coral reef. Explanation of the corals, the reef, and the animals associated with the reef are given. The underwater shots are beautiful and of good quality for teaching. Adaptation is stressed to the various habitats. A short review of some of the basic principles ends the film.

Recommended: 7th grade to 12th grade.

Date: Running time, 29 minutes; color; sound.

16mm Movie No. 91

"Survival in the Sea - The Life Cycle"

Produced by Indiana University

An interesting correlation of land plants to marine plants introduces this movie. The theme, as the title suggests, is the life cycle in the sea. The movie is relatively extensive in its handling of producers, consumers and decomposers. Much emphasis is placed on feeding merchanisms of various organisms. The movie is very well organized. This movie is highly recommended as a supplement to a unit or course in biology, be it marine or general.

Recommended: Seventh grade.

Data: Running time, 29 minutes; color; sound.

16mm Movie No. 84

"Plankton in the Open Sea"

Produced by Encyclopaedia Brittanica Films

This a good general movie showing methods of collecting and studying plankton, and explaining its importance as the pasturage of the sea. Phyto plankton and zooplankton are

Recommended: Seventh grade and above.

Data: Running time, 19 minutes; color and sound.

Filmstrip

"The Oceans" Produced by McGraw-Hill Book Co.

This filmstrip is elementary in approach. It is excellent as an introduction to oceanology. It begins with the history of the oceans. It covers extinct organisms, the ocean as a barrier to races of people, and as a great highway of travel. Other areas covered are tides, climate control, currents, moisture reservoir, mineral bank, food reservoir (fish), some of fresh water, bottom topography, methods of exploration, and earth layers.

Recommended: Fourth grade through seventh grade.

Data: The text is on the filmstrip. Normal running time is about half an hour. Color.

Filmstrip

"The Sea" Produced by UNESCO (United Nations)

This filmstrip seems designed for high school students. It treats oceanology on a general and world-wide scale from shorelines to ocean depths. Narration is read by the instructor. This film can be used effectively as an introduction or culmination to a course on marine science. Incidentally, the script is available in French, Spanish and English.

Filmstrips (8)

"Science of the Sea"

Produced by Bailey Films Inc.

This filmstrip series is in 8 parts and is elementary in approach. Although the film is of Pacific Coast, it can be used effectively in our area as an elementary course on the sea.

The films cover Rocky Shores, Sandy Beach, Open Coast, Open Sea, Sea, Sea Oddities, Science of the Sea, Field trips to the Seashore, and Sounds of the Sea.

Narration for "Science of the Sea" and "Sounds of the Sea" ae are provided by phonograph record. Narration for the other strips can be read from the screen.

All in all these films can be a good supplement to an elementary unit on the sea.

Recommended: Fourth grade to sixth grade.

Data: Color.

"Oceanography-Understanding our Deep Frontier"

National Academy of Sciences

This series is aimed at the high school student. The series is illustrated with art work throughout. Narration is provided by 33 1/3 RPM phonograph records. The script is also written out so that the teacher can read it. This printed materiall includes a glossary and a bibliography on each subject. The filmstrip series can be used effectively with a unit on oceanography.

1. "Physical Oceanography"

   This filmstrip covers basic phenomena of the oceans. It includes waves, tides, and ocean currents in some detail.

2. "Chemical Oceanography"

   This filmstrip covers general concepts of chemicals in sea water. It covers currents, density, salinity, salts as nutrients for plants, origin of salts, etc.

3. "Geological Oceanography"

   This filmstrip deals with the general features of the ocean and their formation. Composition of the oceans floor is also discussed.

4. "Biological Oceanography"

   This filmstrip deals with the life cycle and feeding habits of marine organisms. The food chain in the sea is emphasized. Problems of food shortage facing

man are also examined.

5. "Ocean Engineering"

This filmstrip deals with man's technological efforts in the sea. It describes mining operations and research projects.

6. "Marine Resources"

This strip covers topics from the oceans as commercial highways to harvesting of fish. It is directed toward a better understanding of the resources available.

7. "Air-Sea Interaction"

This strip shows that the interaction between ocean and atmosphere is quite complex. The importance of CO_2, evaporation and heat transfer are some of the subjects covered.

8. "A Career in Oceanography"

This strip tells how a young person interested in oceanography may pursue his or her career.

Recommended: High School.

Data: Running time for phonograph records is about 20 minutes for each filmstrip.

"The World We Live In" Produced by Life Filmstrips

The photogrpahy of this series is excellent. The whole group appears to be directed for tenth grade and above. Narration is on the screen. Stimulating discussion of controversial ideas are entered. Recommended for a high school unit in science.

Part I

"The Earth is Born"

Excellent on the evolution of the earth and related planets. History is related from cosmic dust to earth in its present form.

Part III

"The Miracle of the Sea"

This strip covers the creation of the oceans, names of the oceans, topography of the bottom, life, currents, winds, tides, waves, and shore erosion.

Part III

"Mighty Currents of the Sea"

This strip begins with the creation of the ocean currents and covers currents and the suns heat, currents and the earths rotation, currents and the winds, and counter currents. The last part deals with the Gulf Stream and a new theory of the ice ages.

Part VII

"Creatures of the Sea"

This film does an excellent job of covering some basic knowledge about life in the sea. It covers the ocean as a medium, body forms of animals, plankton, necton, benthos, locomotion, food cycles, defense, and reproduction.

Part VII

"The Coral Reef"

Excellent on general aspects of the coral reef. The film shows structure, limiting factors, types of coral reefs etc. Special emphasis is placed on the history and forces working on the Great Barrier Reef of Australia. The formation of coral islands and the animals that subsequently inhabit them are discussed. The last part deals with vertebrates, and invertebrates that inhabit a reef.

About three hundred Kodacolor slides were obtained from Turtox (General Biological Supply House, Chicago). Although some of these slides are of questionable quality, the majority are good enough to illustrate the general nature of the plant, animal or place they depict. If carefully selected, they can be useful teaching tools.

Algae	67	
Sponges	4	
Coelenterates	33	
Mollusks	62	
Annelids	4	
Arthropods	10	
Echinoderms	32	
Marine Fishes	38	
Marine Vertebrates	9	(mostly mammals)
Selected Habitats	20	
Assorted turtox charts	40	(No Keys included)

In addition to commercially-prepared slides, the Marine Science Project is building up a file of original 35 mm. slides. These are primarily of project activities and natural habitats.

LIST OF FILMS AVAILABLE ON FREE LOAN FROM SOURCES

OTHER THAN CARTERET COUNTY REGIONAL MARINE SCIENCE PORJECT

Data From: National Oceanographic

Data Center: Publication Number C-4

In most cases, faster service will be given if the film is ordered direct. However, if difficulty is encountered, the Marine Science Project will be glad to order these movies for you. Call 728-4651 about two weeks in advance of your showing date. You should allow at least this time when ordering them yourself.

16mm Movie

"Blessing From the Sea"

Available on free loan from:
Florida Phosphate Council
P.O. Box 1565
Lakeland, Florida 33802

Emphasizes the importance of phosphorus for life, with a brief review of the geological past. Describes the mining of phosphate ore, a natural marine sediment, and its processing, from the mining site to the loading of phosphates on freighters. Stresses the economic importance of phosphate mining.

Recommended: Secondary schools and General public.

Data: Running time: 20 minutes; color and sound.

16mm Movie

"Budget Size Bikini"

Available on free loan from:
Director
U. S. Army Engineer Waterways
Experiment Station
Post Office Box 631
Vicksburg, Mississippi 39181

Stepwise account of all the operations connected with shallow water explosions in a testing basin. Shows the instrumentation and procedures followed. Scaled explosions are compared with full size blasts, to study the behavior of shock wave phenomena and wave characteristics.

Recommended: Colleges and General public.

Data: Running time: 14 mintues; color and sound.

16mm Movies

"Careers in Oceanography"

Available on free loan from your Naval District. For eastern N. C. Write: Commandant
5th Naval District
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 2351)

When requesting, refer to MN 10063

As the expanding world population turns to the sea for additional resources, crops, minerals, and energy, this film shows the types of research and activities that await the future oceanographer in the laboratory or aboard ship and the equipment available to assist him.

Recommended: Elementary schools, Secondary schools and General Public.

Data: Running time; 28 mintues; color; and sound.

16mm Movies

"Challenge of the Sea"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
5th Naval District
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

When requesting, refer to: MN-10021

Provides a general coverage of oceanography, emphasizing its importance to the Navy. Good film, best used as an introduction to the subject.

Recommended: Secondary schools, Colleges and General Public.

Data: Running time: 23 mintues; color; and sound.

16mm Movie

"Corrosion"

Available on free loan from:
The Glidden Paint Company
Union Commerce Building
925 Euclid Avenue
Cleveland, Ohio 44115

Presents some of the typical corrosion problems encountered by ferrous metal in the atmosphere. Explains how corrosion can be avoided or delayed; stresses the importance of a good surface preparation.

Recommended; Secondary schools, General public and Specialists.

Data: Running time; 24 minutes; color and cound.

16mm Movie

"C.S. 'Long Lines'"

Available on free loan from:
Local Bell System representative or affiliated company.

Provides information on the cablelaying operations on the ocean floor. Shows how the C.S. LONG LINES was able to establish a cable connection between Hawaii and Japan with a detour to the Philippines and what steps were taken to make the 5300 mile voyage successful.

Recommended: Secondary schools and General public.

Data: Running time: 28 minutes; color; and sound.

*In areas when the telephone company is not the Bell System, write to: Modern Talking Pictures Inc.
503 North College Street
Charlotte, North Carolina 28202

Film strip (83 frames)

"Deep Frontier"

Available on Free loan from:
Bureau of Commercial Fisheries
Department of the Interior
Washington, District of Columbia
202040 or Commercial Fisheries
Regional Office.

Presents all phases of oceanography, with special emphasis on exploitation of resources, sampling problems, and oceanographic instrumentation. Well planned and clearly explained. Provides a good introduction to oceanography for the layman. Contains no acturl pictures, made up of drawings.

Recommended: Secondary schools, Colleges and General public.

Data: Running time; 17 minutes; color; and sound track on a record.

16mm Movie

"Gulf of Mexico Shrimp Trawls"

Available on free loan from:
Gear Research Station
Bureau of Commercial Fisheries
P.O. Box 1909
Panama City, Florida 32402

Shows by means of underwater scenes the relationship between trawl configuration and performance, how the towing speed affects the shape of the net and its fishing ability, and some of the problems inherent to botton trawling.

Recommended: Specialists.

Data: Running time: 30 minutes; color and sound.

16mm Movie

"Identification of Sea Ice"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

Gives basis for identification of sea ice by showing the various stages of its formation. Provides brief but complete coverage of main types of sea ice. Well edited and clearly explained; best to be used, however, in conjunction with a lecture or preparatory instructions.

Recommended: Secondary schools; Colleges and General public.

Data: Running time: 12 minutes; color and sound.

16 mm Movie

"Indian Ocean Expedition"

Available on free loan from :
Indian Information Services
2107 Massachusetts Avenue, N.W.
Washington, District of Columbia
20008

Introduces the International Indian Ocean Expedition, in which 20 countries and 40 ships participated, and defines its goals. Explains the purposes and demonstrates the techniques by which oceanographic data are collected. Emphasizes some of the immediate and long range benefits of oceanographic research.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 36 minutes; black and white, and sound.

16mm Movie

"Introduction to Underwater Sound"

Available on free loan from:
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

When requesting, refer to: MN-8857.

Reviews basic elements of sound. Demonstrates reverberation types, temperature effects, and Doppler effects. Introductory film, geared to sonar operations.

Recommended: Secondary schools and General public.

Data: Running time: 20 minutes; sound, black and white.

16mm Movie

"Island Oddities"

Available on free loan.from:
Modern Talking Picture Service
3 East 54th Street
New York, New York 10022

Presents the coastal fauna of the Bahama Islands (birds, jelly-fish, starfish, octopuses, crabs, etc.) in their natural habitats.

Recommended: Secondary schools and General public.

Data: Running time: 26 minutes; color and sound.

16mm Movie

"Manager of the Sea"

Available on free loan from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami,
Florida 33149

Gives the fundamentals of fisheries research, showing tagging operations, scale studies, etc., as a means of achieving maximum catch.

Recommended: Elementary schools; Secondary schools and General public.

Data: Running time: 15 minutes; Black and White; sound.

16mm Movie

"Marine Borers"

Available on free loan from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami
Florida 33149

Demonstrates the damages inflicted by marine borers to piers, pilings, boats, etc., and how marine biologists are attempting to minimize this threat.

Recommended: Elementary schools, Secondary schools and General public.

Data: Running time: 14 minutes; sound; black and white.

16mm Movie

"Marine Borers"

Available on free loan:from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami
Florida 33149

Demonstrates the damages inflicted by marine borers to piers, pilings, boats, etc., and how marine biologists are attempting to minimize this threat.

Recommended: Elementary schools, Secondary schools and General public.

Data: Running time: 14 minutes; sound; black and white.

16mm Movie

"Marine Corrosion"

Available on free loan from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami
Florida 33149

Explains how corrosion occurs in the marine environment and how the effects can be minimized.

Recommended: Elementary schools; Secondary schools and General public.

Data: Running time: 13 mintues; sound; black and white.

16mm Movie

"Minerals From The Sea"

Available on free loan from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami
Florida 33149

Discusses the presence of minerals in sea water, their commercial exploitation, and some of their uses.

Recommended: Elementary schools; Secondary schools and General public.

Data: Running time: 14 minutes; sound; black and white.

16mm Movie

"Mission Oceanography"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
5th Naval District
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

When requesting, refer to MN-10145

Introduces the world of oceanography, showing some recent developments in oceanographic endeavors and research, including SEALAB I, FLIP, NOMAD buoys, TRIESTE, etc., and tells of the growing importance of the marine sciences for the national defense and welfare.

Recommended: Secondary schools, Colleges and General public.

Data: Running Time: 30 mintues; color and sound.

16mm Movie

"New Water for a Thirsty World"

Available on free loan from:
Bureau of Reclamation
Department of the Interior
Building 53, Denver Federal Center
Denver, Colorado 80225

Emphasises the value of water in general and the growing needs of industry, agriculture, and population centers. A number of possible solutions is offered to remedy the situation, all of which involve conversion of sea water to fresh water at low cost (sea water electrofreezing, reverse osmosis, vapor compression, distillation, etc.).

Recommended: Secondary schools and General public.

Data: Running time: 21 minutes; color and sound.

16mm Movie

"Oceanographic Studies of George's Bank"

Available on free loan from:
ESSA
Washington Science Center
Rockville, Maryland 20852

When requesting, refer to:
P-1056-25

Demonstrates techniques of current measurement by means of radio signals from a current meter anchored to a buoy. Includes underwater scenes showing the effect of waves on the behavior of the current meter and its impeller, also formation of ripple marks on the sea bottom and sand migration under the influence of waves. Can be used to support lectures.

Recommended: Secondary schools and Colleges.

Data: Running time: 15 minutes; color and sound.

16mm Movie

"Oceanography; Science for Survival"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

Outlines the participation of U. S. Government agencies in the Oceanographic Program. Emphasizes the role of oceanography in national defense. Shows the importance of ocean studies for our understanding of the world around us.. Major techniques and new developments are presented. A predictable ocean with all subsequent benefits is shown as the goal.

Recommended: Secondary schools and General public.

Data: Running time: 42 minutes or 28.5 minutes; color and sound .

Refer to: MN-9835 (complete version)
MN-9835A(condensed version)

16mm Movie

"1,000 Feet Deep for Science"

Available on free loan from:
Motion Picture Center
Westinghouse Electric Corp.
Gateway Center
Pittsburgh, Pennsylvania 15222

Depicts the diving operations of the Cousteau Diving Saucer off the coast of Southern California. Explains launch and retrieval procedures for the Cousteau Diving Saucer; shows in situ pictures of the Scripps Canyon to depths of 1,000 feet.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 27 minutes; color and sound.

16mm Movie

"Plowshare"

Available on free loan from:
Audio Visual Branch
Division of Public Information
U. S. Atomic Energy Commission
Washington, District of Columbia
20545

Explores the possibilities of nuclear explosives for peaceful purposes, showing how their enormous power can be used for mining minerals or excavating channels, harbors, etc., for projects that would be otherwise impossible or impractical.

Recommended: Secondary schools; colleges; General public; (Available at the popular or at the professional level)

Data: Running time: 28 minutes; color and sound.

16mm Movie

"Problem at Port Washington"

Available on free loan from:
U. S. Army Engineer Waterways
Experiment Station
Corps of Engineers
Office of the Director
Vicksburg, Mississippi 39181

Shows a scale model of Port Washington used to study wave action on harbor facilities. Illustrates means by which storm damage can be reduced. Mechanically produced waves are used to demonstrate wind effects. Presents model experiments which resulted in the design of an efficient jetty for the protection of Port Washington Harbor and also in considerable money saving.

Recommended: Secondary schools; Colleges and General public.

Data: Running time: 10 minutes; sound; black and white.

16mm Movie

"Project Mohole Report Number One"

Available on free loan from:
The American Petroleum Institute
Committee on Public Affairs
1271 Avenue of the Americas
New York, New York 10020

Relates the Project Mohole story, giving the background of the project and its purpose. Drilling operations are presented in some detail, showing the first 1,200 foot core obtained from the ocean floor.

Recommended: Secondary schools and General public.

Data: Running time: 20 minutes, color and sound.

16mm Movie

"Protection of Mooring Buoys"

Available on free loan from:
National Association of Corrosion Engineers
980 M & M Building
1 Main Street
Houston, Texas 77002

Demonstrates the effectiveness of a variety of protective anti-corrosion and antifouling coatings and techniques on 15 test buoys after a 6-month exposure to sea water. Also shows all the operations connected with the problem of mooring, retrieving, and cleaning buoys.

Recommended: Specialists.

Data: Running time: 45 minutes (one 30- and one 15-minute reel) color and sound.

16mm Movie

"Return to Bikini"

Available on free loan from;
Audio Visual Branch
Division of Public Information
U. S. Atomic Energy Commission
Washington, District of Columbia
20545

Presents a survey made by a team of scientists from the Laboratory of Radiation Biology of the University of Washington on the Enlwitok and Bikini atolls where they studies the aftereffects of nuclear tests on the environment, the flora, and the fauna.

Recommended: Secondary schools, Colleges, General public.
(Available at the popular or at the professional level)

Data: Running time: 23 minutes; color and sound.

16mm Movie

"Sealab I"

Available on free loan from your
Naval District. For eastern
N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

Describes the Navy's first attempt to maintain personnel on the sea floor. Presents the problems of lowering and raising the Sealab I structure, the installations, living conditions aboard, and work performed.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 29 minutes; color and sound.

16mm Movie

"Ship 'Explorer' Oceanographic Cruise 1960"

Available free from:
ESSA
Washington Science Center
Rockville, Maryland 20852

When requesting, refer to: P-1056-30

Presents cruise of the EXPLORER from Seattle to the North Atlantic through the Panama Canal, with a demonstration of the oceanographic work being carried out while under way. Shows a plankton net, current meter, underwater camera, dredge, magnetometer, and reversing water bottles in operation. Good introduction to field work. Interesting underwater scenes of instruments and of sea bottom.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 30 mintues; color and sound.

2

16mm Movie

"Terrestrial Isotopic Power Systems"

Available on free loan from:
Audio Visual Branch
Division of Public Information
U. S. Atomic Energy Commission
Washington, District of Columbia
20545

Illustrates some of the possible uses of unattended power systems, buoys, lighthouses, weather stations, deep sea beacons, and off-shore oil platforms. Construction and installation of units which provide electric power from heat generated by decay of radioisotopes is also depicted.

Recommended: Secondary; Colleges; General public. (Available at the popular or at the professional level)

Data: Running time: 25 minutes; color and sound.

16mm Movie

"The Nuclear Ship 'Savannah'"

Available on free loan from:
Audio Visual Branch
Division of Public Information
U. S. Atomic Energy Commiasion
Washington, District of Columbia
20545

Covers the historical background, design, construction, launching, sea trials, and first voyage of the N. S. Savannah, the world's first nuclear powered merchant ship.

Recommended: Secondary schools; Colleges; General public (Available at the popular or at the professional level).

Data: Running time: 28 minutes; color and sound.

16mm Movie

"The Restless Sea"

Available on free loan from:
Local Bell System representative
or affiliated company.*

Gives a complete coverage of all oceanographic phenomena and of their importance to man. Illustrates a number of major concepts. Reviews current investigating techniques. Excellent presentation in photographed and animated sequences of all facets of oceanography.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 1 hour (two 30 minute reels); color and sound.

*In areas where the telephone company is not the Bell System, write to: Modern Talking Pictures Inc.
503 North College Street
Charlotte, North Carolina 28202

16mm Movie

"The Shrimp"

Available on free loan from:
Institute of Marine Science
University of Miami
Rickenbacker Causeway
Virginia Key, Miami
Florida 33149

Relates the growing importance of commercial exploitation of shrimp resources and related activities.

Recommended: Elementary schools; Secondary schools and General public.

Data: Running time: 14 minutes; sound; black and white.

16mm Movie

"The Story of Sealab II"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfilk, Virginia 23511

When requesting, refer to: MN-10100B

Covers the many activities associated with the Sealab II experiments, relating in detail the main points of this complex attempt to colonize the continental shelf.

Recommended: Secondary schools; Colleges and General public.

Data: Running time: 30 minutes; color and sound.

16mm Movie

"Tidal Power"

Available on free loan from;
Division Engineer
U. S. Army Engineer Division
New England
424 Trapello Road
Waltham, Massachusetts 02154

Records study made by the United States and Canada on the economical feasibility of employing the tidal power for electrical energy in the areas around Passamaquoddy and Cobscook Bays in Maine and New Brunswick, Canada. Includes a tour of project sites with explanations of the project.

Recommended: Secondary schools and General public.

Data: Running time: 22 minutes; color and sound.

16mm Movie

"Tides and Currents"

Available on free loan from:
ESSA
Washington Science Center
Rockville, Maryland 208 52

When requesting, refer to:
P-1056-24.

Describes tidal phenomena, reviews tide producing forces and their influence, tide recording instruments, and tide predicting machines. Gives a brief coverage of tidal currents and their measurements. Useful as an introduction to the subject. Could be profitably used to illustrate a lecture.

Recommended: Secondary schools, Colleges and General public.

Data: Running time: 15 mintues, color, and sound.

16mm Movie

"Time Lapse Study of Antarctic
Ice Floes and Tidal Currents"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

When requesting, refer to: MN-10152

Presents a year-long record taken at Wilkes Station of the movements of ice floes in and out of Newcomb Bay. Demonstrates that ice floe movements follow the same pattern as the currents, irrespective of wind speed and direction. Also shows many cloud formations and the changes they undergo with time, as well as the progressive freezing and thawing of the ice in the Bay.

Recommended: Colleges and General public.

Data: Running time: 26 minutes; color and sound.

16mm Movie

"Tsunami"

Available on free loan from:
ESSA
Washington Science Center
Rockville, Maryland 20852

Presents the operation of a tsunami detection and warning system.

Shows how tsunamis originate and how their effects can be minimized.

Some scenes of actual tsunamis add to the interest of the film.

Recommended: Secondary schools and General public

Data: Running time: 28 minutes; color and sound.

16mm Movie

"Voice Beneath the Sea"

Available on free loan from:
Local Bell System representative
or affiliated company.

Gives a brief review of the progress of telephone communication. Presents step-by-step the production of an underwater cable. Shows in detail the laying of the cable between Clarenville, Canada, and Oban, Ireland. Emphasizes the communication aspect.

Recommended: Secondary schools and General public.

Data: Running time: 28 minutes; color and sound.

*In areas where the telephone company is not the Bell System, write to: Modern Talking Pictures Inc.
503 North College Street
Charlotte, North Carolina 28202

16mm Movie

"Wood Preservation Effect on Marine Organisms"

Available on free loan from your
Naval District. For eastern N. C.
Write: Commandant
Assistant for Public Affairs
U. S. Naval Base
Norfolk, Virginia 23511

When requesting, refer to: 8167-C

Reviews the types of wood borers, providing information on their life history and mode of boring. Examples are well illustrated and given a rather thorough treatment. Excellent introduction to the subject.

Recommended: Secondary schools; Colleges and General public.

Data: Running time: 20 minutes; color and sound.

INDEX OF MOVIES AND FILMSTRIPS

(35 mm slides on page 27)

*Indicates films available at Carteret County Marine Science Project.

A Career in Oceanography..... 24*
Air Sea Interaction..... 24*
Between the Tides..... 11*
Big Fish-Little Fish..... 12*
Biological Oceanography..... 23*
Blessing from the Sea..... 29
Budget Size Bikini..... 30
Careers in Oceanography..... 31
Challenge of the Oceans..... 3*
Challenge of the Sea..... 32
Chemical Oceanography..... 23*
Corrosion..... 33
Count Down Under..... 44
Creatures of the Sea..... 26
Deep Frontier..... 35
Geological Oceanography..... 23*
Gulf of Mexico Shrimp Trawls..... 36
Identification of Sea Ice..... 37
Indian Ocean Expedition..... 38
Introduction to Underwater Sound..... 39
Island Oddities..... 40
Life in the Ocean..... 13*
C. S. LONG LINES..... 34
Manager of the Sea..... 41
Man Invades the Sea..... 4A*
Marine Borers..... 42
Marine Corrosion..... 43
Marine Ecology..... 14*
Marine Resources..... 24*
Mighty Currents of the Sea..... 25*
Minerals from the Sea..... 44
Mission Oceanography..... 45
New Water for a Thirsty World..... 46
Ocean Engineering..... 24*
Oceanographic Studies off George's Bank..... 47
Oceanography; Science for Survival..... 48
One Thousand (1,000) Feet Deep for Science... 49
Phycical Oceanography..... 23*
Plankton and the Open Sea..... 15*
Plowshare..... 50
Problem at Port Washington..... 51
Project Mohole--Phase One..... 52
Protection of Mooring Buoys..... 53
Return to Bikini..... 54

Science of the Sea (Film strip)..... 22*
Sea Shell Animals; Molluscs..... 16*
SEALAB I 55
Secrets of the Underwater World;
The Secrets of Life Series..... 17*
Ship EXPLORER Oceanographic
Cruise 1960..... 56
Survival in the Sea; Life on the Coral Reef. 18*
Survival in the Sea; The Life Cycle..... 19*
Survival in the Sea; Where Land and Water
Meet..... 7*
Terrestrial Isotopic Power Systems..... 57
The Beach-A River of Sand..... 8*
The Coral Reef..... 26*
The Earth is Born..... 25*
The Earth; Its Oceans..... 5*
The Miracle of the Sea..... 25*
The Nuclear Ship "SAVANNAH"..... 58
The Oceans..... 20*
The Restless Sea..... 59
The Sea--La Mer-- El Mar..... 21*
The Shrimp..... 60
The Story of SEALAB II..... 61
Tidal Power..... 62
Tidal and Currents..... 63
Tides of the Ocean..... 9*
Time Lapse Study of Antarctic
Ice Floes and Tidal Currents..... 64
Tsunami..... 65
Voice Beneath the Sea..... 66
Waves on Water..... 10*
What's Under the Ocean..... 6*
Wood Preservation Effect on
Marine Organisms..... 67

E-111
SE

FROM:

ERIC FACILITY
SUITE 601
1735 EYE STREET, N. W.
WASHINGTON, D. C. 20006